## **Using qps to Check Memory Usage**

You can use the qps tool to check the memory usage of jobs running on Pleiades, Aitken, or Electra. This tool is a Perl script that uses Secure Shell (SSH) protocol to access each node of a running job in order to get process status (ps) information on each node.

For Pleiades, Aitken, and Electra jobs, you can run qps on the PFEs.

The qps tool is available in the /u/scicon/tools/bin directory.

TIP: Add the directory to your shell startup script so that you can invoke qps without typing the full path each time. For example:

```
set path = ( $path /u/scicon/tools/bin )
Syntax:
```

pfe21% qps job\_id

## **Example:**

```
pfe21% qps 26130
*** Job 26130, User abc, Procs 1 \,
NODE
          TIME
                   %MEM %CPU STAT TASK
rli0n14 10:17:13  2.8 99.9 RL ./a.out
r1i0n14 10:17:12 2.9 99.9 RL
r1i0n14 10:17:18 2.9 99.9 RL
                                     ./a.out
                                    ./a.out
rli0n14 10:16:34 2.9 99.8 RL
r1i0n14 10:17:11 2.9 99.9 RL
r1i0n14 10:17:13 2.9 99.9 RL
                                     ./a.out
                                     ./a.out
rli0n14 10:17:12 2.9 99.9 RL
                                     ./a.out
r1i0n14 10:17:15 2.9 99.9 RL
```

Note: The percentage of memory usage by a process reported by this script is a percentage of the memory in the entire node.

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